What is claimed is:

1. An absorber element for solar high-temperature heat generation, having a light focusing element, an outer tube composed of a translucent material and an absorber which is arranged in the outer tube and to which the solar rays are passed by the light focusing element, wherein

the absorber is surrounded by at least one reflector channel, whose surface has a low emission and absorption capability, and which reflects the heat radiation which originates from the absorber back to the absorber;

the focal line of the light focusing element lies on the centre axis of the outer tube, and the absorber does not lie on the centre axis of the outer tube;

an opening gap in the reflector channel runs on the centre axis of the outer tube and the solar rays fall on the absorber through this opening gap; and

the absorber comprises an absorber tube, through which a heat carrier medium circulates, and absorber plates which are mounted on the absorber tube, with the absorber plates being curved such that they essentially completely absorb the solar rays which are incident on them through the opening gap.

2. An absorber element according to Claim 1, wherein the inner face of the reflector channel, which points towards the absorber, is formed from a small number of essentially planar surfaces.

3. An absorber element according to Claim 1, wherein an outer reflector channel, which surrounds an inner reflector channel, is provided coaxially with respect to the inner reflector channel and has essentially the same characteristics as the inner reflector channel.

4. An absorber element according to Claim 3, wherein the inner and the outer reflector channels are jointly readjusted to track the sunlight.

5. An absorber element according to Claim 4, wherein the inner and the outer reflector channels are readjusted by means of magnets which are mounted on a holding structure outside the outer tube.

6. An absorber element according to Claim 1, wherein the absorber together with the absorber tube and the absorber plates is firmly mounted, and is not readjusted.

7. An absorber element according to Claim 1, wherein the light focusing unit comprises sheet deflection mirrors and parabolic groove mirrors.

8. An absorber element according to Claim 1, wherein the light focusing unit has at least one linear convergent lens.

9. An absorber element according to Claim 1, wherein the outer tube is composed of glass.

10. An absorber element according to Claim 1, wherein the heat carrier medium is water.

11. An absorber element according to Claim 10, wherein the steam which is generated in such absorber elements is supplied to a process machine for electricity generation.

12. An absorber element according to Claim 11, wherein the process machine is a reciprocating piston motor with stepped pistons.

13. A method for producing an absorber element according to Claim 1, wherein the absorber element is first of all assembled, but with the wall of the reflector channel initially not having an opening gap yet, and parallel laser light is then injected via the light focusing unit and burns the opening gap out of the wall of the reflector channel.